



## **Emergencies preparedness, response**

## What is a pandemic?

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A pandemic is the worldwide spread of a new disease.

An influenza pandemic occurs when a new influenza virus emerges and spreads around the world, and most people do not have immunity. Viruses that have caused past pandemics typically originated from animal influenza viruses.

Some aspects of influenza pandemics can appear similar to seasonal influenza while other characteristics may be quite different. For example, both seasonal and pandemic influenza can cause infections in all age groups, and most cases will result in self-limited illness in which the person recovers fully without treatment. However, typical seasonal influenza causes most of its deaths among the elderly while other severe cases occur most commonly in people with a variety of medical conditions.

By contrast, this H1N1 pandemic caused most of its severe or fatal disease in younger people, both those with chronic conditions as well as healthy persons, and caused many more cases of viral pneumonia than is normally seen with seasonal influenza.

For both seasonal and pandemic influenza, the total number of people who get severely ill can vary. However, the impact or severity tends to be higher in pandemics in part because of the much larger number of people in the population who lack pre-existing immunity to the new virus. When a large portion of the population is infected, even if the proportion of those infected that go on to develop severe disease is small, the total number of severe cases can be quite large.

For both seasonal and pandemic influenza, the highest levels of activity would be expected to occur in the usual influenza season period for an area. (In the temperate climate zones, this is usually the winter months, for example). But as was seen with the current H1N1 pandemic, pandemics can have unusual epidemiological patterns and large outbreaks can occur in the summer months.

